

### **REMARKS**

The present Amendment is in response to the Office Action. The Specification is amended to correct a typographical error. Furthermore, claims 5-7, 14, 15, and 38 are cancelled and claims 1, 11, 16-18, 20, 23, 31, and 35 are amended. Claims 1-4, 8-13, 16-37, and 39-43 are now pending in view of the above amendments.

Applicants note that the following remarks are not intended to be an exhaustive enumeration of the distinctions between any cited references and the claimed invention. Rather, the distinctions identified and discussed below are presented solely by way of example to illustrate some of the differences between the claimed invention and the cited references. In addition, Applicants request that the Examiner carefully review any references discussed below to ensure that Applicants understanding and discussion of the references, if any, is consistent with the Examiner's understanding.

Applicants also note that the remarks presented herein have been made merely to clarify the claimed embodiments from elements purported by the Examiner to be taught by the cited reference. Such remarks, or a lack of remarks, are not intended to constitute, and should not be construed as, an acquiescence, on the part of the Applicants: as to the purported teachings or prior art status of the cited references; as to the characterization of the cited references advanced by the Examiner; or as to any other assertions, allegations or characterizations made by the Examiner at any time in this case. Applicants reserve the right to challenge the purported teaching and prior art status of the cited references at any appropriate time.

Reconsideration of the application is respectfully requested in view of the above amendments to the claims and the following remarks. For the Examiner's convenience and reference, Applicants' remarks are presented in the order in which the corresponding issues were raised in the Office Action.

## **CLAIM REJECTIONS**

### **I. Obviousness Type Double Patenting Rejection**

In the Office Action, the Examiner rejects various claims under the judicially created doctrine of obviousness-type double patenting based on U.S. Patent No. 7,099,382, and U.S. Patent Application Serial Nos. 10/420,027; 10/629,228; 10/629,302; 11/073,452; and 11/118,172. Applicants submit herewith a terminal disclaimer relative to U.S. Patent No. 7,099,382, and U.S. Patent Application Serial Nos. 10/420,027; 10/629,228; 10/629,302; 11/073,452; and 11/118,172 in order to overcome this rejection. Withdrawal of the rejection and allowance of the pending claims is respectfully requested in view of the terminal disclaimer.

### **II. Rejection Under 35 U.S.C. § 103**

The Office Action rejected claims 1-38 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,665,498 Jiang et al. (*Jiang*) in view of U.S. Patent No. 6,832,052 (*Marmur*) and rejected claims 1-38 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 7,308,060 Wall et al. (*Wall*) in view of U.S. Patent No. 6,832,052 (*Marmur*). Applicants respectfully traverse the rejections.

#### **A. Claims 1-15 and 24-28**

Claim 1, as amended, recites, “receiver bypass circuitry for switchably selecting, based on a data rate of the first electrical data stream, a bypass data path from the first electrical input port to the first electrical output port to bypass retiming and reshaping of the first serial electrical data stream.” According to the Examiner, neither *Jiang* nor *Wall* “specifically teach a receiver bypass circuitry...” See *Office Action*, Section 13 and 14. However, the Examiner relied on *Marmur* as purportedly teaching receiver bypass circuitry and asserted that it would have been obvious to combine *Jiang* with *Marmur* and to combine *Wall* with *Marmur*. See *id.*

Although a selector 14 in *Marmur* “can feed either an electrical signal from one of the main path 16 or the bypass path 22...” (see col. 3, lines 28-31), the selector 14 does not “switchably [select], based on a data rate of the first electrical data stream,” as claimed. Instead, “The FPGA control module 12...sets the selector 14 to the main path 16 for any ingressing optical signal in [a] list of optical signal types and to the bypass path 22 for any other ingressing optical signal.” (see col. 3, lines 12-16) (Emphasis added.) Notwithstanding the Examiner’s

assertions to the contrary, switching to a bypass path based on signal type does not constitute “switchably selecting, based on a data rate of the first electrical data stream, a bypass data path,” as claimed. (Emphasis added.) Therefore, even if the references were combined in the purportedly obvious manner, the resulting combination fails to include all the limitations of claim 1 and therefore no *prima facie* case of obviousness has been established.

Claims 11, 24, and 35, although of different scope, each recite language similar to that of claim 1, discussed above. In particular, claim 11, as amended, recites, “switchably selecting or not selecting a bypass data path based on a data rate of the first electrical data stream.” (Emphasis added.) Claim 24 recites: “receive path bypass circuitry configured so that when the first data stream has a data rate less than about 10Gb/s, the first data stream bypasses the receive path eye opener circuitry along a first bypass path.” (Emphasis added.) Finally, claim 35, as amended, recites, “receive path bypass circuitry configured so that when the first serial electrical data stream has a data rate below a predetermined threshold, the first serial data stream bypasses the receive path eye opener circuitry along a first bypass path.” (Emphasis added.) Therefore, for at least the same reasons discussed above with respect to claim 1, no *prima facie* case of obviousness has been established with respect to claims 11, 24, and 35. Accordingly, the rejection of claims 1, 11, 24, and 35, and corresponding dependent claims 2-10, 12-15, 25-34, and 36-38, should be withdrawn.

#### **B. Claim 16**

Claim 16, as amended, recites, “means for switchably selecting, based on at least one of a loss of lock (LOL) signal and a loss of signal (LOS) signal, a bypass data path to the means for transmitting to bypass retiming and reshaping of the first serial electrical data stream.” As discussed above in connection with claim 1, *Marmur* teaches switching to a bypass path based on an ingressing signal type. Thus, selector 14 is not a “means for switchably selecting, based on at least one of a loss of lock (LOL) signal and a loss of signal (LOS) signal, a bypass data path,” as claimed. Accordingly, no *prima facie* case of obviousness has been established with respect to claims 16 and the rejection of claim 16 should be withdrawn.

#### **C. Claims 17-21, 22, and 23**

Claim 17, as amended, recites, “receiver eye opener circuitry for retiming and reshaping the serial electrical data stream, the receiver eye opener circuitry including at least two retiming

and reshaping data paths for the serial electrical data stream, each data path having a different data rate range.” Claim 23, although of different scope, recites similar language: “means for retiming and reshaping the serial electrical data stream including at least two retiming and reshaping data paths for the serial electrical data stream, each data path having a different data rate range.” Moreover, claim 22, although of different scope, recites similar language at least in its recitation of “a data path that has a data rate range,” among other things.

While not specifically addressing the aforementioned claim limitations, the Examiner has indirectly asserted that the references describe “at least two...data paths...each data path having a different data rate range,” as required by claims 17 and 23, or “a data path that has a data rate range,” as required by claim 22. For example, in rejecting claims 4 and 18-20 the Examiner asserted, “the combination of Jiang et al and Marmur teaches the bypass data path is selected when the first serial electrical data stream has a data rate that is not within a data rate range of the receiver eye opener circuitry (i.e., Figures 1 and 2 of Marmur, col. 2, lines 45-67 and col. 3, lines 1-46).” See *Office Action*, Section 14. As another example, the Examiner asserted, in rejecting claim 33, that the references teach “each of [a] plurality of eye openers being configured to operate in connection with a predetermined data rate or predetermined range of data rates.” See *id.* (referencing Fig. 2; col. 3, lines 34-67; col. 4, lines 1-67; and col. 5, lines 1-48 of *Jiang*; and referencing Figs. 1 and 2 of *Marmur*). However, Applicants can find no discussion of any sort of data rate range within the cited portions or figures of *Jiang*, *Wall*, and *Marmur*, let alone “at least two...data paths...each data path having a different data rate range,” as required by claims 17 and 23, or “a data path that has a data rate range,” as required by claim 22.

Moreover, the Examiner has not established that the references, whether considered individually or in combination, teach or suggest “at least two retiming and reshaping data paths,” as required by amended claims 17 and 23.

Therefore, inasmuch as the Examiner has failed to show that the references include all the limitations of claims 17, 22, and 23, no *prima facie* case of obviousness has been established. Accordingly, the rejection of claim 17, corresponding dependent claims 18-21, 22, and claims 22 and 23 should be withdrawn.

### **CONCLUSION**

In view of the foregoing, Applicants believe the claims as amended are in allowable form. In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, or which may be overcome by an Examiner's Amendment, the Examiner is requested to contact the undersigned attorney.

Dated this 1<sup>st</sup> day of August, 2008.

Respectfully submitted,

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